

3. "On the Influence of the Moon on the Atmospheric Pressure, as deduced from the Observations of the Barometer made at the Magnetic Observatory at St. Helena." By Lieutenant J. H. Leffroy, R.A., late Director of that Observatory. Communicated by Lieut.-Col. Sabine, R.A., F.R.S.

In order to determine the dependence of the barometric pressure on lunar influence, the author arranges all the two-hourly observations in each lunar month with relation to the time of the moon's passing the meridian; entering in one column the observation of each day nearest to the meridian passage, whether before or after; and entering in separate columns those corresponding to two hours, four hours, six hours, &c., before and also after that observation. The monthly means at every two hours from the meridian passage are then taken; and again, the means at the same intervals, for each three months from September 1840 to December 1841. From the results thus obtained the author states that it appears that the moon's passage over both the inferior and superior meridian produces a slight increase of pressure; a maximum in the curve occurring at both (that of the latter being slightly the greater), while the minima correspond to the moon's rising or setting.

It appears also, that the rise of the tides will not account for the whole amount of the increase of pressure, even admitting that it has a tendency to produce an effect of that nature. The times of maxima do not correspond; and there appears to be no atmospheric establishment. The pressure is greater about the period of new moon than at full moon; and greater in the third and fourth than in the first and second quarters; a result which agrees with that given by Mr. Howard for the climate of London. The observations of both years agree in making the pressure greater under the Perigee than under the Apogee. Mr. Howard had found that the mean pressure in Great Britain, which is in the opposite hemisphere from St. Helena, is greater under the Apogee than under the Perigee.

4. "Notices of the Aurora Australis from the 1st to the 31st of March 1841, made on board H.M.S. Erebus; extracted from the log-book." By Captain James Clark Ross, R.N., F.R.S.

5. "An Appendix to a paper on the Nervous Ganglia of the Uterus, with a further Account of the Nervous Structures of that Organ." By Robert Lee, M.D., F.R.S.

After premising a short history of the opinions of Galen, Dr. William Hunter, Mr. John Hunter, Professor Tiedemann, Professor Lobstein, and Professor Osiander, relative to the existence, course, and enlargement of the nerves of the uterus, the author adverts to his own researches on this subject, which commenced with his discovery, in April 1838, of the trunk of a large nerve accompanying the uterine vein, and of the great nervous plexus with which it was continuous. Of this discovery he gave an account to the Royal Society in a paper read on the 12th of December of the same year. In a subsequent paper, he described some large nervous ganglia